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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/920,738	08/03/2001	Takahiro Norimatsu	109828	5067

25944 7590 09/09/2003

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EXAMINER

FAISON, VERONICA F

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 09/09/2003

9

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application N .

09/920,738

Applicant(s)

NORIMATSU ET AL.

Examin r

Veronica F. Faison

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
- ☒ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. ____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- ☐ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- ☐ Interview Summary (PTO-413) Paper No(s). ____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

Response to Amendment

Claims 1, 3-10 and 16-20 have been amended and no claims have been added or canceled. Hence, claims 1-20 are pending in the application. The amendment was persuasive to the extent that the 103 rejection over Yatake ('770) in view of Goto ('914) has been withdrawn.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 1-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yatake (US Patent No. 6,004,389) in view of Goto et al (US Patent 6,048,914).

Yatake (US Patent No. 6,004,389) teaches an ink composition comprising a pigment, water and a glycol ether selected from the group consisting of diethylene glycol mono-m-butyl ether, triethylene glycol mono-n-butyl ether, propylene glycol mono-n-butyl ether and dipropylene glycol mono-n-butyl ether (abstract and col. 3 lines 13-21). The pigment may be present in the ink composition in the amount of 2 to 15 percent by weight (col. 3 lines 56-57). The ink composition may further comprise a water-soluble organic solvent such as ethylene glycol monobutyl ether, diethylene glycol mono-t-butyl ether and propylene glycol mono-t-butyl ether, dipropylene glycol monomethyl ether present in the amount of 5 to 60 percent by weight (col. 4 line 64-col. 5 line 23). Water is present in the amount to make up the remaining balance of the ink composition which overlaps Applicant's claimed range (See examples). The reference further teaches that various additives such as surfactants, antiseptic agents, pH adjustors and surface tension modifiers may be present in the ink composition (col. 5 line 26-col. 6 line 33). The ink composition may also comprise a dye selected from a direct, acid, basic, reactive and food dye (col. 6 lines 34-39). Yatake discloses that a surfactant and/or a regulated polymerization type water-soluble resin may be used to further accelerate or stabilize the dispersion of the pigment (col. 15 lines 14-19). The reference also teaches that the ink composition may be used in a recording system using writing utensils, such as pens (col. 3 lines 5-8). Yatake fails to teach polypropylene glycol n-butyl ether having three or more oxypropylenes.

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Goto et al teaches ink composition comprising glycol ethers such as propylene glycol monobutyl ether, dipropylene glycol monobutyl ether, and tripropylene glycol monobutyl ether.

The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have replaced propylene glycol mono-n-butyl ether with tripropylene glycol monobutyl ether because the substitution of art recognized equivalents as shown by Goto et al would have been within the level of ordinary skill in the art.

Response to Arguments

Applicant's arguments filed June 18, 2003 have been fully considered but they are not persuasive. Applicant argues that the reference (Goto) contains nothing that would have taught or suggest that tripropylene glycol n-butyl ether or any other polypropylene glycol having three or more oxypropylene in its molecule, is equivalent to the propylene and dipropylene glycol mono n-butyl ether in the Yatake '389 ink composition. Moreover, any possible suggestion of equivalence in Goto would have been limited to an ink composition directed toward writing. The Examiner disagrees with Applicant that Goto contains nothing that would have taught or suggest that tripropylene glycol n-butyl ether or any other polypropylene glycol having three or more oxypropylene in its molecule, is equivalent to the propylene and dipropylene glycol mono n-butyl ether. When a reference discloses various solvent used for the same purpose in the ink composition they are known as equivalence absence evidence to the contrary. The Examiner would also like to point out the Yatake '389 may also be used in a writing utensils, however the

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reference remains silent to the actual surface that the writing is performed on. However, it would have been obvious to one of ordinary skill in the art to recognize that propylene glycol monobutyl ether, dipropylene glycol monobutyl ether, and tripropylene glycol monobutyl ether are functional equivalences.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Veronica F. Faison whose telephone number is 703-305-3918. The examiner can normally be reached on Monday-Thursday and alternate Fridays 8 am to 5 pm.

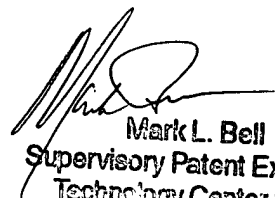
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell can be reached on 703-308-3823. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.



Veronica F. Faison



Mark L. Bell
Supervisory Patent Examiner
Technology Center 1700